Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C.

In the Matter of	
Indiana County, Pennsylvania, Emergency Mana	gement Agency)
)
Request for Waiver of the January 1, 2013)
Narrowbanding deadline)
	1

To: Chief, Public Safety and Homeland Security Bureau

Request for Waiver

Pursuant to Section 1.925 of the Federal Communications Commission's (the "Commission") rules, the Indiana County, Pennsylvania Emergency Management Agency (the "County") hereby submits a request for waiver of the January 1, 2013 narrowbanding deadline. The County is in the process of implementing a new P25 digital trunked public safety radio system in the 800 MHz frequency band, which will be utilized by all emergency response, public safety and county government agencies within Indiana County. The County is currently under contract for this system with Motorola Solutions, Inc. ("Motorola") and its subcontractor Alcatel-Lucent, JG Contracting Company, Inc., and Salsgiver Telecom Fiber and the County is in the process of acquiring radio sites and finalizing the system design. This trunking system will replace the conventional wideband analog VHF stations currently in use by the County to dispatch public safety agencies within Indiana County.

The project schedule initially targeted a migration to the 800 MHz system prior to January 1, 2013. However, delays resulting from site acquisition and regional integration have extended the implementation schedule into 2013. There are many variables that have a high probability of further impacting the schedule which could push the cutover date further into 2013. These factors include:

- Each radio tower site is still in the planning, leasing/acquisition, design and permitting/zoning
 process. There is no guarantee that the state radio office, local planning and zoning agencies and
 boards will execute leases and/or approve the proposed towers within the projected time frames
 shown on the schedule. This process could potentially add six to nine months to the project if one
 or two key sites are not acquired, zoned and permitted in a timely manner, as projected.
- Radio sites will require NEPA Environmental Impact Studies, pole access permits for fiber, and special conservation or geotechnical studies which, if complicated by mining concerns or environmental issues, could delay the project extensively. This delay would push back system deployment and commissioning.
- 3. Leases, pole permits and agreements with landowners and third party tower owners have not been finalized. Should site acquisition efforts arrive at an impasse or be delayed for mutual approval, the County may have to locate alternate sites and negotiate those leases. These processes could further push the schedule past the January 1 2013 deadline.

4. Radio coverage testing must be scheduled when the weather and foliage support the testing plan accepted with the vendor.

If the system could only be partially built out by January 1, 2013 due to delays in site acquisition, zoning, permitting, etc, it would be necessary to continue to operate the current VHF frequencies until the point that all site development and connectivity is completed and coverage could be successfully tested on the system.

Specifically, the County requests until September 30, 2013 to complete its migration off of all applicable VHF and UHF wideband analog stations.

The information provided in this waiver request pertains to all public safety agencies within Indiana County that plan to migrate to the planned 800 MHz trunking system. A list of the applicable call signs has been provided in Appendix A.

In DA 11-1189 released on July 13, 2011, the Commission provided guidance to licensees for the filing of waivers of the narrowbanding deadline. The Commission cited the requirements of FCC rules section 1.925¹ which state that waivers must demonstrate that "(i) the underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and that a grant of the waiver would be in the public interest; or (ii) in view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative." Relative to the requirements of FCC rules section 1.925, the Commission recommended the following content for waiver requests:

- · Steps already taken to plan for, initiate, and complete the transition to narrowband operations
- · System size and complexity
- Whether system equipment is narrowband-capable or must be replaced or upgraded
- Whether the licensee plans additional system upgrades or improvements in addition to converting to narrowband operation
- Funding sources, including whether the licensee's budget requires government approval or a multi-year budget process
- Whether the licensee's narrowbanding schedule is affected by neighboring systems due to interoperability relationship or other interdependencies
- Plans to minimize the negative impact of extended wideband operations on co-channel and adjacent channel operations, including a description of the spectrum environment in the affected area
- If the licensee plans to migrate to a non-VHF/UHF band (e.g., 700 MHz or 800 MHz), whether
 it will relinquish VHF/UHF spectrum once it has migrated and the amount of spectrum to be
 relinquished

Further, the Commission has requested the following:

¹ 47.C.F.R §§ 1.925(b)(3)

- What steps in the process have been or will be taken prior to January 1, 2013
- Anticipated dates of commencement and completion of:
 - Replacement or retuning of mobiles/portables
 - Infrastructure replacement or returning

The County has supplied applicable criteria for each of the above listed FCC recommendations for waiver content.

Steps already taken to plan for, initiate, and complete the transition to narrowband operations

The County is well aware of the FCC requirements for licensees to migrate to narrowband operations. One of the driving factors behind the planned 800 MHz system is to satisfy narrowbanding requirements by permitting agencies to migrate off of legacy VHF spectrum. The County initially contracted with a consulting company to determine the best approach for satisfying the narrowbanding deadline. The results of that study determined that a new 800 MHz trunking system was the ideal technology to both satisfy the narrowbanding deadline and correct critical system deficiencies including coverage, capacity, and interoperability.

The County has since contracted with Motorola, JG Contracting, and Salsgiver Telecom. At this time the system design has been finalized pending site acquisition and site/fiber network buildout, orders have been placed with Motorola Solutions Inc. for the system infrastructure. Tower and site equipment procurement is underway. 800 MHz spectrum is currently being secured to support use on the system.

Pursuant to FCC rules section 1.925, the County has no other narrowbanding alternative than to proceed with the plans currently in place. Insufficient time exists to properly plan and executive an alternative approach which would satisfy the January 1, 2013 deadline. Such an approach would require funding to replace infrastructure incapable of narrowband operation and resources which are not available in lieu of the present commitment to build out an 800 MHz trunked systems. An alternate approach would likely involve the ongoing use of conventional and simplex VHF equipment which would not address critical communications deficiencies presently experienced within the County. Therefore, an alternate approach would be inequitable, unduly burdensome, and contrary to the public interest."

System size and complexity

The County is comprised of roughly 829 square miles of land and 5 square miles of water. The County's population is approximately 88,880. The County includes 14 boroughs and 24 townships.

The legacy systems currently in place within Indiana County are comprised of over 30 conventional VHF low band, VHF high band, and UHF simplex and repeater stations.

The proposed system will be a countywide simulcast trunked system utilizing 14 tower sites. The system is designed to provide countywide portable hip-level on street coverage. The system will operate on the P25 Phase I standard and be capable of P25 Phase II utilizing TDMA. The system as proposed by Motorola will utilize 6 frequencies in a single simulcast zone and be part of a multi-county system on a

single master switch, connected by a microwave/fiber network for inter-county operability. The system will support up to 1200 subscriber radios within the first year of operation.

It was determined that a countywide trunked simulcast P25 system was the only technology available which would adequately address the communications deficiencies experienced on the present conventional systems. Pursuant to FCC rules Section 1.925, failure to build out the trunked system in lieu of another narrowbanding approach will be contrary to the public interest.

Whether system equipment is narrowband-capable or must be replaced or upgraded

The legacy VHF subscriber equipment and fixed infrastructure in use within the County is comprised of a mix of equipment that is not narrowbanding capable and equipment that can be upgraded to narrowband operation. However, none of this legacy equipment is capable of operating in the 800 MHz band.

Therefore, all VHF high band subscriber equipment and fixed infrastructure currently in use within the County will be replaced when the 800 MHz system is implemented.

Whether the licensee plans additional system upgrades or improvements in addition to converting to narrowband operation

The County's narrowband migration will consist of the implementation of an entirely new 800 MHz P25 Phase I simulcast trunked system. The system will address critical coverage, capacity, and interoperability deficiencies experienced on the present VHF conventional systems.

The system replacement is necessary to provide first responders with an effective and reliable communications system. Failure to provide the system in lieu of another narrowbanding alternative will be contrary to the public interest.

Funding sources, including whether the licensee's budget requires government approval or a multiyear budget process

The planned 800 MHz P25 trunking system has been fully funded. The budget for the planned system was approved by the County Commissioners in December 2010 when the contract was signed with Motorola. The contracted price of the system is \$7,051,316. The County has also executed a Microwave contract with Motorola at the cost of \$1,409,969, a site development contract with JG Contracting at the cost of \$2,984,264, and a fiber contract with Salsgiver Telecom at the cost of \$2,148,023. The combined total cost of the infrastructure system is \$13,593,572. As evidence of the County's funding commitment, signed contract pages from Motorola, JG Contracting, and Salsgiver Telecom contracts have been provided in Appendix B.

In lieu of the County's funding commitment to build out a countywide trunked system, insufficient funding exists for the County to pursue an alternate approach which would assure compliance with January 1, 2013 deadline. Such an approach would be inequitable, unduly burdensome or contrary to the public interest.

Whether the licensee's narrowbanding schedule is affected by neighboring systems due to interoperability relationship or other interdependencies

The County's narrowbanding schedule is minimally affected by neighboring systems. One neighboring system currently operates in the 800 MHz frequency band, and another is also constructing an 800 MHz trunked system using the same master controller to increase interoperability. These three Counties are developing a shared switch for County operations as soon as the 800 MHz broadcast and fiber/microwave connectivity infrastructure is ready. For those neighboring jurisdictions that do utilize VHF and UHF radio systems, the County will rely upon specific narrowband channels which will be utilized for interoperability purposes. Gateway systems will be used where applicable to minimize any degradation experienced by cross communication between wideband and narrowband programmed radios. The County is actively communicating with interoperability partners to assure that interoperability is maintained throughout the narrowbanding transition and following the County's migration to 800 MHz

Plans to minimize the negative impact of extended wideband operations on co-channel and adjacent channel operations, including a description of the spectrum environment in the affected area

Most of the jurisdictions immediately neighboring the County to the west and south operate or will be operating 800 MHz trunking systems, and will thus not be impacted by the extended wideband operations within the County. For those neighboring agencies to the east and north that will continue to operate VHF and UHF systems, co-channel interference problems are not expected to increase because of the transition to narrowband operations. Anticipated interference problems would likely be adjacent channel in nature. 7.5 kHz-offset adjacent channels in the VHF band have been available for quite some time but have been treated by frequency coordinators as co-channel to adjacent wideband operations. No additional interference is anticipated from existing licensed stations. Potential interference from existing stations is anticipated to decrease as neighboring jurisdictions narrowband their equipment. Interference resulting from the extended use of wideband channels is only expected by new licensees operating in closer proximities than those distances currently permitted by frequency coordinators. The County will address these interference issues on a case by case basis, and will take all reasonable steps necessary to remedy the interference. These steps will include adjusting antenna patterns, reducing base station ERP, reducing mobile ERP, narrowbanding specific channels if the level of effort is manageable, or ceasing operating altogether.

The overall length of time the County will operate on wideband channels beyond January 1, 2013 is anticipated to be no longer than 9 months. Based on typical licensing times for new stations and typical system build-out periods of 1 year, the amount of time that any interference issues could be expected will be minimal.

If the licensee plans to migrate to a non-VHF/UHF band (e.g., 700 MHz or 800 MHz), whether it will relinquish VHF/UHF spectrum once it has migrated and the amount of spectrum to be relinquished

The County plans to migrate primary operations to the 800 MHz frequency band. Once the 800 MHz system has been accepted and cutover to the system has been completed, most legacy VHF equipment

licensed to the County will be decommissioned and the corresponding spectrum will be relinquished. The VHF high band frequency used for regional EMS interoperations as authorized on KSO954 must remain in service until the all EMS providers cease operations on this frequency. A single UHF channels will be retained by the County for interoperability purposes as part of the Pennsylvania Emergency Management Agency Radio System (PEMARS). A list of the applicable call signs and frequencies held by the County which will be relinquished following cutover to the 800 MHz system have been provided in Appendix C.

Narrowbanding Timetable

The County and Motorola Solutions, Inc. have developed a detailed project schedule outlining the step by step implementation schedule. The detailed project schedule has been provided in Appendix D.

Pursuant to DA 11-1189, the following key dates have been provided:

Milestone	Completion Date
Radio Sites Secured	May 31, 2012
System Design Finalized	June 15, 2012
All Site/infrastructure Equipment Ordered	June 15, 2012
Equipment Radio/Microwave/Paging Staging	May 15, 2012
Completed	
Fixed Infrastructure Installed/Optimized	November 30, 2012
System Functional Testing Completed	January 15, 2013
System Coverage Testing Completed	May 15, 2013
Subscriber Units Deployment Complete	May 15, 2013
System Cutover Completed	June 15, 2013
System Acceptance	August 31, 2013
System Coverage Testing Completed Subscriber Units Deployment Complete System Cutover Completed System Acceptance	May 15, 2013 June 15, 2013

Authority to Grant the Requested Waiver

Section 1.925(b)(3) allows the Commission to grant waivers if the underlying purpose of the rule would not be served or would be frustrated by application of the rule in the instant case and/or in view of the unique circumstances, the application of the rule would be inequitable, unduly burdensome, or contrary to the public interest.²

The narrowbanding deadline was established as a means to force land mobile radio users to implement spectrally efficient technologies so that newly created channels could be effectively utilized. The County is currently implementing a spectrally efficient technology available in a P25 Phase I trunked simulcast FDMA system. The system as proposed will utilize 6 repeater frequencies compared to the over 25 stations currently in use within the County. Forcing the County to adhere to the January 1, 2013 will require the County to abandon the planned 800 MHz trunking system and develop an alternate strategy to renew legacy VHF and UHF systems. This requirement would be contrary to the underlying purpose of

² 47.C.F.R §§ 1.925(b)(3)

the rule as the County would be forced to abandon a spectrally efficient design for a spectrally inefficient design.

The County has committed extensive time and resources into the current plan to build out a trunked 800 MHz system. The technology was identified as the optimum solution to address the critical deficiencies identified within the present communications systems. Should the system not be constructed as planned, first responders will be forced to continue to utilize communications systems which provide inadequate coverage, capacity, and interoperability. Based on the resources committed to the present project, it is not likely that an alternate narrowbanding approach could be developed which would satisfy the January 1, 2013 deadline. Therefore, application of the rule would be inequitable, unduly burdensome, and contrary to the public interest. In the instant case, the County has no other reasonable alternative than to proceed with the presently planned 800 MHz system.

Conclusion

The County has shown that granting of the requested relief would be in the public interest and would promote safety of life and property. The requested relief falls squarely under the provisions of Section 1.925(b)(3) of the Commission's rules. The Commission has the ability to grant this application and significantly improve the communications capabilities for the first responders within Indiana County. The County requests that the Commission find this request in the public interest and grant the application, as submitted.

Respectfully submitted,

Thomas A. Stutzman, Director

Indiana County Emergency Management Agency

Appendix A – Indiana County Call Signs

Call Sign	Licensee
KSO954	Indiana, County of
KNHU240	Indiana, County of
KFY426	Indiana, County of
WQDU756	Indiana, County of
WQAH626	Indiana, County of

Appendix B - Proof of Funding

payment obligations exist, Sections 5.1 and 5.2 (Contract Price and Invoicing and Payment); Subsection 9.7 (Disclaimer of Implied Warranties); Section 11 (Disputes); Section 14 (Limitation of Liability); and Section 15 (Confidentiality and Proprietary Rights); and all of the General provisions in Section 16.

The Parties hereby enter into this Agreement as of the Effective Date.

Motorola, Inc.

Indiana County, Pennsylvania **Board of Commissioners**

By: AMWILL NASAU
Name: JACQUELVN WASAU
Title: MSST VICE PRESIDENT
Date: 12 22 10

Name: Rodney D. Ruddock
Title: CHAIRMAN COMMUSSIC NEC

Patricia A. Evanko Title: Commissioner

Date: December 22-2010



Change Order # 1

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Changes in Servi			
training, Accepts	ork required for the implementa nce Tests, and Warranty suppo stem Description		
Exhibit C-6 – Tra			
Exhibit C-4a – Ac Exhibit F-a – Wai	cceptance Test Plan		
changes discusse parties also envis	s: adio System Performance Sche ed in the Detailed Design Revie sion conducting a Detailed Desi mance Schedule (Exhibit C-5)	ew. See attached a ign Review of the N	ipdated Exhibit C-5. The licrowave System and will
Customer Respon	sibilities:		
See attached Ext			
	e for this Change Order: nent terms applicable to this chan nibit B-a	je order)	
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N WITNESS WHEI Motorola So By: Name: Title:	hange Order will prevail. REOF the parties have executed to pluttions, Inc. Patty Holtschneider MSSSI Vice President	his Change Order as By: Name: Title: Date: By:	of the last date signed below. torner Rodney Ruddock Chairman David Frick
N WITNESS WHEI Motorola So By: Name: Title:	hange Order will prevail. REOF the parties have executed to pluttions, Inc. Patty Holtschneider MSSSI Vice President	his Change Order as Cus By: Name: Title: Date: By: Name:	of the last date signed below. torner Rodney Ruddock Chairman David Frick

₩ мо	PTOROLA SOLUTIONS	Name:	CHANGE ORDER Change Order # 1) Patricla Evanko
		Title:	Commissioner
		By: Name: Title:	Robin Maryai Chief Clerk
	·		County Seal
Reviewed by:	James Lambert Motorola Solutions Project Manager		Date: 11/11/11

- Contractor shall actively recruit minority subcontractors or subcontractors with substantial minority representation among their employees.
- Contractor shall include the provisions of this nondiscrimination clause in every subcontract, so that such provisions will be finding upon each subcontractor.
- 10. Contractor obligations under this clause are limited to the contractor's facilities within Pennsylvania or, where the contract is for purchase of goods manufactured outside of Pennsylvania, the facilities at which such good are actually produced.

CONTRACTOR: JG Contracting Company, Inc.
BY: Marie Sepermoi 4/27/2011
TITLE Principal
APPROVED: INDIANACOUNTY)
BY: 2 Miller 5/3/11
TITLE: COMMISSIONER

STATEMENT OF WORK

Between The County of Indiana and Salsgiver, Inc.

INDIANA COUNTY

Signatures

SALSGIVER, INC.	BOARD OF COMMISSIONERS
Jan Salz	Rodney D. Ruddock, Commissioner
	David S. Frick, Commissioner
Attest/Witness, Robin Mavyai, Chief Clerk	Patricia A. Evanko, Commissioner
6 - 9 - 11	6-8-11

Appendix C – Relinquished Spectrum

<u>Licensee</u>	Call Sign	<u>Frequencies</u>	Will be Vacated
Indiana, County of	KSO954	155.34	No
		155.22	Yes
Indiana, County of	KNHU240	154.74	Yes
		155.01	Yes
		155.79	Yes
		155.22	Yes
		155.43	Yes
		155.07	Yes
		155.475	Yes
Indiana, County of	KYF426	154.98	Yes
Indiana, County of	WQAH626	453.525	No
		458.525	No
Indiana, County of	WQDU756	154.74	Yes
		159.465	Yes

)	Task Name	Duration	Actual Start	Start	Actual Finish	Finish	% Complete
1	Project Start	697 days?	Wed 12/22/10	Wed 12/22/16	NA.	That 8/22/13	50°e
2	Contract Award	248 days?	Wed 12/22/19	Wed 12/22/16	Fei 12/2/11	Fri 12/2/11	100%
9	coi	158 days	Wed 11/16/11	Wed 11/16/11	NA.	Mon 6-25-12	1196
16	Frequency Acquidition	III days	Fei 8/19/11	Fri 3/19/11	Fei 1.29-12	Fri 1/20/12	1864
19	Fleet Mapping and Templates	232 S days	Thu 5/5/11	Thu 5/5/11	NA	Mon 3/26/12	69%
26	Order Processing	257 days	Fri 7/22/t1	Fe17/22/11	NA.	Mos 7/16/12	78%
40	Equipment Manufacturing	269 days	Wed 8/17/11	Wed \$/17/11	NA	Mon 8/27/12	32%
54	Staging	25 days	Tue 10/11/11	Tue 16/11/11	Tue 11/15/11	Tue 11/15/11	106%
60	Ar meter ang	219 days	Wed 11/16/11	Wed 11/16/11	NA	Mon 9/17/12	61%
230	Indiana	224 days	Wed 11/16/11	Wed 11/16/11	NA.	Mon 9/24/12	4500
231	Strong: Hill Indiana County 4	289 days	Wed 11/16/11	Wed H/16/11	NA	Mon 9/3/12	41%
232	Backhad	I day	NA	Mes: 9/3/12	NA	Mon 9/3/12	3 %
233	Civil Work	il days	NA.	More 3/5/12	NA	Mos 3/19/12	0%
234	Receive and Inventory Equipment	105 days	Wed 11/16/11	Wed 11/16/11	NA.	Tue 4/19/12	FP%
235	FNE Motorola	EZ days.	Wod 11/16/11	Wed 11/16/11	Thu 12/1/11	Thu 12/1/11	100%
236	FNE Non-Metarola	12 days	Wod 11/16/11	Wed 11/16/11	Thu 12/1/11	Thu 12/1/11	100%
237	Autonia	2 days	NA.	Mon 4/9/11	NA.	Tuc 4/10/12	9%
238	Install FNE	5 days	NA	Mon 7/2/12	NA.	Fri 7/6/12	0%
39	Install MW FNE	5 days:	N.A.	Mon 7/2/12	XA.	Fri 78/12	9%
740	Install Automas	5 days	NA	Tue 5/22/12	NA.	Mon 5/28/12	0%
241	Install MW Anomars	5 days	N/A	Fue 5/22/12	NA.	Mos 5/28/12	0%
47	Penn View Indiana County 5	209 days	Wed 11/16/11	Wed 11/16/11	NA.	Mon 9/3/12	50°6
243	The section of	i day	hi A	Mon 9/3/12	NA.	Mon 9/3/12	OA.
44	Civil Work	II days	NA.	Mon 3/5/12	NA.	Mos 3/19/12	0%
45	Receive and Inventory Equipment	185 days	Wed 11/16/11	Wed 11/16/11	NA.	Tue 4/19/12	43.0
46	FNE Mounds	E2 days	Wed 11/16/11	Wed 11/16/11	Tlou 12/1/11	Thu 12/1/11	100%
47	FNE Non-Materials	11 days	Wed 11/16/11	Wed 11/16/11	The 12/1/11	Thu 12/1/11	100%
48	Antonia	2 days	NA	38or 4/9/12	N4	Tuc 4/10/12	8%
49	Install FNE	5 days	NA NA	Most 7/9/12	NA NA	Fri 7/13/12	0%
50	Install Ardenus		NA NA	Tue 5/29/12	NA.	Man 6/8/17	3776
51	Elishi School Indiana County 1	5 days 189 days	Wed 11/16/11	Wed 11/16/11	NA NA	Mon 9/3/12	53%
52	Eschad	*.:	NA NA	Wed 11/10/11	NA NA	Mon 9/3/12	0%
more over	Escenses Civil Work	i day	TALA:	Wed 2/8/12	NA NA		1994
53		7 days				Thu 2/16/12	49%
54	Receive and Inventory Equipment	165 days	Wed 11/16/11	Wed 11/16/11	NA.	Tue 4/10/12	22.2
55 56	FNE Matarola	12 days	Wed 11/16/11	Wed 11/16/11	Thu 12/1/11	Thu E2/E/E1	100%
	FNE Non-Motorola	12 days	Wed 11/16/11	Wed 11/16/11	The 12/1/11	Thu 12/1/11	100%
57	Astense	2 days	NA .	Mon 4/9/12	NA	Tez 4/10/12	0%
58	Install FNE	6 days	NA.	Mon 6/4/12	NA.	Mon-6/11/12	0%
59	lustali Autennas	5 days	NA.	Tue 6/5/12	NA NA	Mon 6/11/12	6%
60	Kinter IIII Indiana County 6	289 days	Wed 11/16/11	Wed 11/16/11	NA	Mon 9/3/12	4100
61	Backhad	1 day	NA	Mon 9/3/12	N.A	Mon 9/3/12	9%
62	Civil Work	11 days	NA	Mon 3/5/12	NA.	Mon 3/19/12	9%
63	Receive and Inventory Equipment	165 days	Wed 11/16/11	Wed 11/16/11	NA	Tue 4/10/12	9 E %
67	Install FNE	5 days	N.A.	Men 7/16/12	NA.	Fri 7/20/12	0%
68	Install MW PNE	5 days	NA	Mon 7/16/12	NA.	Pri 7/20/12	0%
69	Install Antonnas	5 days	NA.	Toc 6/12/12	NA.	Mon 6/18/12	0%
70	Install MW Antennas	5 days	NA	Tue 6/12/12	NA.	Moa 6/13/12	0%
71	911 Center Indiana County 7	289 days	Wed 11/16/11	Wed 11/16/11	NA.	Mon 9/3/12	50%
72	Backhad	E day	NA	Mon 9/3/12	NA	Mon 9/3/12	0%
73	Civil Work	11 days	NA	Mon 3/5/12	NA	Mon 3/19/12	O%.
74	Receive and Inventory Equipment	105 days	Wed 11/16/11	Wed 11/16/11	NA.	Tue 4/19/12	92ª4
75	FNE Materela	12 days	Wed 11/16/11	Wed 11/16/11	Thu 12/1/11	Thu 12/1/11	100%

1D	Task Name	Duration	Actual Start	Start	Actual Finish	Finish	% Complet
276	FNE Non-Motorda	LI days	Wed 11/16/11	Wed 11/16/11	Thu 1.1/1/11	Thu 12/L/11	100%
277	Amenna	2 days	NA	Men. 4/9/12	N.A.	Tise 4/10/12	3%
278	lastall FNE	5 days	N.A	Men 7/23/12	NA	Fri 7/27/12	3%
279	Freshall Andersons	5 days	NA	Tue 6/19/12	NA.	Mon 6/25/12	9%
280	Young Township Indiana County 11	269 days	Wed 11/16/11	Wed 11/16/11	NA	Mam 9/3/82	41%
281	Backford	t day	Ma	More 9/3/12	N.S.	Mon 9.3/12	0%
282	Civil Work	11 days	NA	Mos 3/5/12	NA	Mon 3/19/12	6%
283	Receive and Inventory Equipment	165 days	Wed 11/16/11	Wed 11/16/11	VA.	Tue 4/10/12	92%
284	FVE Motorda			Wed 11/16/11	Thu 12/1/11	There is 2/8/8 1	190%
	1	12 days	Wed 11/16/11				
285	FNE Non-Mestavola	12 days	Wol 11/16/11	Wed11/15/11	Thu 12/1/11	Thu 8.2/8/8 1	150%
286	Assicione	2 days	NA.	Mon. 4/9/12	NA.	Tuc 4/10/12	0%
287	install FNE	5 days	NA.	3-Eon 8/20/12	NA.	Fri 8/24/12	9%
288	fortall MW FNE	5 days	MA	Moon #/20/12	NA	8418/24/12	9%
289	Enstell Automas	5 days	MA	Tue 7/24/12	MA	Mos 7/39/12	9%
290	Install MW Automes	5 đ asys	NA	Toe 7/28/82	NA.	Mom 7/38/11	@% <u>L</u>
291	Ogmer Indiana Comey S	169 days	Wed 11/16/11	West 11/16/11	NA	Mess 9/3/12	51%
292	Electricand	1 day	NA	35mm 9/3/12	NA.	Mon 9.3/12	Q%
293	Cred Wask	10 days	NA.	Time 3/39/82	NA	Man 4/2/12	8%
294	Receive and Inventory Equipment	165 days	West 11/16/11	Wed tt/f6/11	NA	Twe 4/14/12	\$2%
295	FWE Metocoln	12 days	Wed 11/16/11	Wed 18/16/11	Thou E 2/8/6 E	Thus 0.2/0/01	100%
296	FNE Nova-Akertonoda	12 days	Wed 11/16/11	Wed 11/16/11	Thu 12/1/11	The 12/1/11	809%
297	Anterone	2 423%	NA.	35en 4/9/12	"KA	Tec 4/10/12	8%
297 298	East-MFNE	5 days	NA.	Mon 7/30/12	NA.	Fri 83/12	9%
-	Install Agreems		na Na	Tou: 7/3/82	NA.	Mars 7/9/12	397% 39%
296		5 days					-11 7-40
300	Covode Indiana County 9	269 days	Wee 11/16/11	Wed 11/16/11	NA	Mon 93.12	42%
301	Eachback	£ day	MA	Man 9/3/11	NA	Mean 9/3/12	Ø%
302	Civil Work	10 days	NA	Toe 3/39/12	MA	Mess 4/2/12	£1%
303	Receive and Inventory Equipment	HIS days	West History	Web 11/16/11	NA.	Tue-4/10/12	925a
304	FNE Motareks	12 days	Wed 11/16/11	Wed 11/16/11	Thom 1.2/E/E R	Thu 12/1/11	109%
305	FNE Non-Materila	12 days	Wed 11/16/11	Wed 11/16/11	Thru 1.2/1/11	The 1.2/1/1 i	100%
306	Astrones	2 days	NA	Mary 4/9/12	N.A.	Tec 4/10/12	9%
307	Install FNE	5 days	NA	Moss 8/6/12	NA	Srisant2	0%
306	fostall NW ENE	5 days	NA	Mars 8/6/12	NA	Fri*/19/11	53%
309	Install Austromes	5 days	NA:	Due 7/19/12	NA	Mon 7/16/12	0%
310	Install MW Americans	5 days	NA.	Time 7/846/92	NA.	Mom 7/16/12	0%
311	Cherry Tree Indiana Comey 3	209 days	Wed 11/16/11	Wed 11/16/11	NA.	Mess 9/3/62	58%
312	Backland	er in et ioni erenaturi i ion	NA.	Mon 9/3/12	NA NA	Mon 9/3/12	926
313	Eschemik Onel Week	t day 10 days	NA:	Fri 2/17/12	NA Va	10 m 3/1/12	9%
							12%
314	Receive and inventory Equipment	1965 days	Wed 11/16/11	Wet 11/16/11	NA	Tue 4/19/12	J
315	FNE Metarola	12 days	Wed 11/16/11	Wed 11/16/11	Thm 12/1/11	Thu 1.2/1/11	196%
316	FNE Non-Motorda	12 days	Weé 11/16/11	Wed 11/16/11	The 11/1/11	Hbu 12/1/11	199%
317	Audenus	ž days	NA	Mess 4/9/12	NA	Twc 4/10/12	0%
318	Install FNE	5 days	NA	Mem 6/25/12	NA	Fri 6/29/12	9%
319	Install Automore	5 days	NA	Tue 6/26/12	NA	Mess 7/2/12	69%
320	Sheketa Indiana County 2	197 days	Tim 12/1/11	Thu \$2/\$/11	NA.	Mon 9/3/12	dire.
321	Eackload	1 day	NA:	Mon 9/3/12	NA	Mon 9/3/12	0%
322	Civil Work	E day	NA	Fei 3/2/12	NA.	Fei 3/2/12	0%
323	Receive and Inventory Equipment	93 days	Thu 12/1/11	The 12/1/11	NA.	Tue 4/10/12	6.02
324	FNE Metocréa	0 days	The 12/8/11	Thu 12/1/11	The 12/1/11	Thu 12/1/11	100%
325	FNE Non-Motouria	0 days	Thu 12/1/11	Thu 02/1/11	The 12-171	Thu 13/8/11	100%
	t de domentes Ambrose		18st 1.2/8/1.1 N/A	Mon 4/9/12	Managara Na	Tue 4/19/12	0%
326		2 days			, , , ,		
327	Install FNE	5 days	N/A	Men 6/18/12	N.A.	Pri 6/22/12	O%

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ID	Task Name	Duration	Actual Start	Start	Actual Finish	Finish	% Complet
328	Install Automas	5 days	NA.	Tue 7/31/12	NA.	Mon 8/6/12	DOMENER 0%
329	Senex Indiana County 13	213 days	Wed 11/16/11	Wed 11/16/11	NA.	Fri 9/7/12	49%
330	Backhaul	1 day	NA.	Mon 9/3/12	NA	Mon 9/3/12	8%
331	Civil Work	Il days	NA.	Mon 3/5/12	NA.	Mon 3/19/12	0%
332	Receive and Inventory Equipment	185 days	Wed 11/16/11	Wed 11/16/11	NA.	Tue 4/10/12	92%
333	FNE Meterola	12 days	Wed 11/16/11	Wed 11/16/11	Thu 12/1/11	Thu 12/1/11	100%
334	FNE Non-Matorola	12 days	Wed 11/16/11	Wed 11/16/11	Thu 12/1/11	Thu 12/L/11	103%
335	Antenna	2 days	NA.	Mon 4/9/12	NA	Time 4/10/12	9%
336	Install FNE	5 days	NA	Men 9/3/12	ŇĀ	Pri 9/7/12	0%
337	Install MW FNE	5 days	NA	Men 9/3/12	NA	Fri 9/7/12	0%
338	Install Automas	6 days	NA	Tue 8/14/12	NA	Tue 8/21/12	9%
339	Install MW Antennas	6 days	NA:	Tue 8/14/12	NA.	Tue 8/21/12	9%
340	Ropers View Indiana County 12	209 days	West 11/16/11	Wed 11/16/11	NA	Mon 93-12	41%
341	Backhaul	1 day	NA.	Mon 9/3/11	NA.	Mea 9/3/12	6%
342	Civil Work	II days	NA.	Mon 3/5/12	NA.	Mess 3/19/12	0%
343	Receive and Inventory Equipment	165 days	Wed 11/16/11	Wed 11/16/11	NA	Tue 4/10/12	91%
344	FNE Meteoda	12 days	Wed 11/16/11	Wed 11/16/11	Thu 12/1/11	Thu 1.2/1/11	109%
345	FNE Non-Matorola	12 days	Wed 11/16/11	Wed 11/16/11	Thu 12/1/11	Thu 12/1/11	100%
346	Austriusa	1 days	NA	More 4/9/12	NA	Test 4/10/12	0%
347	Install FNE	5 days	NA.	Mon 8/27/12	NA.	Fris/31/12	9%
348	install MW FNE	5 days	NA.	Mon 8/27/12	NA	Fri 8/31/12	0%
349	Install Auscenas	5 days	NA.	Tue 8/7/12	NA.	Moa 8/13/12	10°%
350	Install MW Automas	5 days	NA	Tue 8/7/12	NA.	Mon 8/13/12	0%
351	Banks Township Indiana County 18	269 days	Wed 11/16/11	Wed 11/16/11	NA.	Man 9/3/17	42%
352	fl actional	i day	NA.	Mon 9/3/12	NA.	Men 93/12	0%
353	Civil Work	ió days	NA.	Tise 3/6/12	N/A	Mon 3/19/12	0%
354	Receive and inventory Equipment	195 days	Wed 11/16/11	Wed 11/16/11	NA	Tue 4/19/12	97%
355	FNE Meteoritz	12 days	Wed 11/16/11	Wed 11/16/11	Thu 12/1/11	Thu 12/1/11	199%
356	FNE Non-Matorola	12 days	Wed 11/16/11	Wed 11/16/11	Tku 12/1/11	Thu 12/1/11	100%
357	Applemen	2 days	NA.	Man 4/9/17	N/A	Tor 4/10/22	64
358	Install FDE	5 days	NA	Mon 8/13/12	NA.	Fri 8/17/13	0%
359	Install MW FNE	5 days	NA.	Mon 8/13/12	NA.	Fri 8/17/12	9%
360	Install Artennas	5 days	NA.	Toe 7/17/12	%A	Mon 7/23/12	9%
361	Install MW Automas	5 days	NA NA	Tue 7/17/12	NA.	Mon 7/23/12	9%
362	Blue Spruce Indiana County 14	218 days	Wed 11/16/11	Wed 11/16/11	NA.	Fet 9/14/12	54%
363	Backbad	l day	NA	Man 9/1/12	NA NA	Man 9/1/12	0%
364	Civil Work	il days	NA.	Mon 3/5/12	NA.	Mon 3/19/12	0%
365	Receive and inventory Equipment	105 days	Wed 11/16/11	Wed 11/16/11	NA NA	Tue 4/16/12	91%
366	FNE Motorol2	12 days	Wed 11/16/11	Wed 11/16/81	Thu 12/1/11	Thu 12/1/11	10000
367	FNE Non-Metorets	12 days	Wed 11/16/11	Wed 11/16/11	The 12/1/11	Thu 12/1/11	199%
368	Antenna	2 days	NA NA	Mon 4/9/12	NA NA	Tue 4/10/12	0% 0%
	Install FNE		NA NA	Mon 9/10/12	NA NA	Fri 9/14/12	0% 0%
369 370	Install Andermas	5 days	NA.	Mon 9/10/12 Wed 8/22/12	NA NA	Tue 8/28/12	1976 1996
371	Indiana 911 Center Prime Site	5 days 224 days	NA Wed 11/16/11	Wed 11/16/11	NA Na	Moss 9/24/12	4704 6704
371 372						7hn 12/1/11	8/% 198%
	Receive and Inventory Equipment	12 days	Wed 11/16/11	Wed 11/16/11	Thu 12/1/11		
73	Install FNE Prime Site	6 days	NA.	Mon 9/17/12	NA.	Mon 9/24/12	0%
74	Indiana 911 Center Prinse Site Complete	0 days	NA	Mon 9/24/12	NA Sec.	Mon 9/24/12	0%
375	Westmoreland	176 days	Wed 11/16/11	Wed 11/16/11	NA.	Tue 11/27/12	25%
376	New PC Installation Westmoreland County	121 days	Wed 11/16/11	Wed 11/16/11	NA	Wed 5/2/12	77%
377	Receive and Inventory	£7 days	Wed 11/16/11	Wed 11/16/11	The 12841	Thee 12/8/11	109%
378	Install and Program new PC	5 days	NA	Thu 4/26/12	NA	Wed 5/2/12	6%
379	New PC Installation Complete	0 days	NA.	Wed 5/2/12	NA.	Wed 5/2/12	9%

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ID .	Task Name	Duration	Actual Start	Start	Actual Finish	Finish	% Complete
380	Master Site Installation Westmoreland County	125 days	West 11/16/11	Wed 11/16/11	NA.	Tue 5-8/17	61%
381	Receive and Inventory	17 days	Wed 11/16/11	Wed 11/16/11	The 128/11	Thu 1.1/8/11	100%
382	Install FNE Master Site	10 days	Mon 1/9/12	Mon 1/9/12	Fri 1/20/12	Fri 1/20/12	103%
383	UO Master Site	15 days	NA.	Mon 4/16/12	NA.	Fri 5/4/12	en.
384	Install MOSCAD Master Site	2 days	NA	Mon 5/7/12	NA	Tuc 5/8/12	0%
385	Master Site Installation Complete	0 days	NA:	Tuc 5/8/12	N.A	Time 5/8/12	6%
386	Prime Site I Installation Westmoreland County	144 days	Wed 11/16/11	Wed 11/16/11	NA.	Mon 6/4/12	467%
387	Receive and Inventory	17 days	Wed 11/16/11	Wed 11/16/11	Thu 11/8/11	Thu 12/8/11	100%
economic moderno consi					NA NA		9%
388	Install FNE Prime Site 1	9 days	NA:	Mon 3/5/12		Thu 3/15/12	5774 78%
389	UO Prime Site 1	15 days	NA.	Fii 5/11/12	N.A.	Thu 5/31/12	
390	Install MOSCAD Prime Site I	2 days	NA	Fri 6/1/12	N.A.	Mon 6/4/12	0%
391	Frinse Site 1 Installation Complete	0 days	NA	Mes 6/4/12	NA.	Men 5/4/12	Ø%
392	Pristic Size I Installation Westmoreland County	144 days	Wed 11/16/11	Wed 11/16/11	NA.	Man 6412	43%
393	Receive and Inventory	17 days	Wed 11/16/11	Wod 11/16/11	Thu 128/11	The 128/11	199%
394	Install FNE Prime Site 2	ర శేశ్వు క	N.A.	Fri 3/16/12	NA	Fri 3/23/12	1990in
395	UO Prame Site 2	15 days	NA.	Pri 5/11/12	NA	Thu 5/30/12	2%
396	Install MOSCAD Prime Site 2	2 days	NA.	Fri 64/12	NA	Mary 5/4/12	0%
397	Prince Site 2 Installation Complete	@ days	%A	Mora 6/4/12	NA.	35om 5/4/12	0%
398	Remote Site Upgrade Westmoreland County	15 days	NA	Pei5/11/12	NA	Thu 531/12	6°°
399	Remonte Site 1	9.5 days	NA	Fri 5/11/12	NA	Fri 5/41/12	45%
400	Remote Site 2	9.5 days	NA:	Fri 5/11/12	NA	Fri 5/11/11	0%
401	Remarks Site 3	0.5 days	NA	Men 5/14/12	NA	Mon 5/14/12	6%
402	Remote Site 4	0.5 days	NA	Mon 5/14/12	N/A	Man 5/14/12	0%
403	Remote Site 5	0.5 days	NA.	Tuc 5/15/12	NA NA	Fine 5/15/12	694.
403					NA.	Time 5/15/12	0%
	Remote Site 6	6.5 days	NA	Tuc 5/15/82			
405	Remote Site 7	0.5 days	NA	Wed 5/16/12	NA	Wed 5/16/12	9%
406	Remote Site S	9.5 days	NA.	Wed 5/16/12	NA	Wed 54642	9%
407	Reservée Site 9	D.5 days	NA:	Thus 5/8 7/12	NA	Thu 5/17/12	0%
408	Remote Site 10	0.5 days	NA	Visu 5/17/12	N.A	Thu 5/17/82	0%
409	Remote Site 11	6.5 days	NA	Fri 5/18/12	NA	Fri 5/18/12	9% 6
410	Remote Site 12	0.5 days	NA	Fri 5/18/12	NA.	Fri 5/18/12	9%
411	Remote Site 13	0.5 days	NA	Men 5/21/12	NA	Mon 5/21/12	3%
412	Remote Site 14	9.5 days	NA	Men 5/21/12	NA	Mes 5/21/12	5%
413	Remote Site 15	6.5 days	NA	Tue 5/22/12	NA.	Tes: 5/22/12	9%
414	Remote Site 16	0.5 4 234	NA	Tue 5/22/12	NA.	Tes: 5/22/12	9%
415	Remote Site 17	6.5 days	NA.	Wed 5/23/12	N.A.	Wed 5/23/12	6%
416	Remote Site 18	0.5 days	NA	Wed 5/23/12	NA	Well 5/23/12	3%
417	Remote Site 19	0.5 days	NA.	Thu 5/24/12	NA.	Thu 5/24/12	9%
18	Remove Site 20	9.5 days	NA.	The 5/24/12	NA.	Thu 5/24/12	0%
419	Remote Site 28	i day	NA NA	Fin 5/25/12	NA.	Fri 5/25/1.2	0%
	Remote Site 22	-	NA:	Mon 5/28/12	NA NA	Men 5/28/12	0%
120		i day					9% 9%
121	Remote Site 23	i day	NA	Tue 5/29/12	NA.	Tue 5/29/12	2.0
122	Remote Site 14	ž dsy	NA	Wed 5/30/12	NA	Well 5/3/9/12	0%
123	Remote Site 25	i day	NA	Thu 5/31/12	NA	Thu 5/31/12	67%
124	Remote Site Upgrade Complete	0 days	NA	Thu 5/3 L/L2	NA	Thu 5/31/12	9%
125	Armstrong, Indiana Console Installation	95 days	NA.	Men 5/14/12	NA.	Fri 9/21/12	69a
26	Console Installation Armstrong County	51 days	NA	Fri 7/13/12	NA	Fri 9/21/12	୫%
27	Site Development (Electrical)	40 days	NA:	Fri 7/13/12	NA	The 9.6/12	0%
28	Connecessity metalled and tested	3 days	NA	Fa 9/7/12	NA	Tue 9/11/12	0%
29	Consule Install	8 days	NA	Wed 9/12/12	NA	Pri 9/21/12	9%
130	Console Complete	0 days	NA	Fri 9/21/12	NA	Pri 9/21/12	0°6
131	Dispatch Center Console Installation Indiana County	10 days	NA.	Mon 5/14/12	NA.	Fri 5/25/12	6%6

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D	Task Name	Duration	Actual Start	Start	Actual Finish	Finish	% Complete
432	Site Development (Electrical)	E day	NA	Men 5/14/12	NA	Mon 5/14/12	0%
433	Connectivity installed and tested	1 day	NA.	Tue 5/15/12	NA	Tuc 5/15/12	0%
434	Console Install	8 days	NA	Wed 5/16/12	NA	Fri 5/25/12	0%
435	Homer City Cousale Installation Indiana County	13 days	NA.	Men 5/14/12	NA.	Wed 5/36/12	8***a
436	Sele Development (Electrical)	I day	NA.	Mon 5/14/12	NA.	Mon 5/14/12	0%
437	Consectivity installed and tested	1 day	NA	Tue 5/15/12	NA	Time 5/15/12	6%
438	Console install	2 days	NA	Mon 5/28/12	NA	Tue 5/29/12	9%
439	Consolotte Install	I day	N.A.	Wed 5/30/12	NA	Wed 5/36/12	OP.
440	Consolie Complete	G days	N/A	Wed 5/30/12	NA	We4 5/30/12	8%
441	System Optimization	L's days	NA:	Tue 6.5/12	NA.	Tue 11/27/12	6/5/6
442	Link Verification	100 days	NA.	Tue 6.5/12	NA.	Mon 10/22/12	846
443	Look Versitentoes - Versimes classed		NA.	Time 6/9/12	NA NA	Hea 6/7/12	69%
		3 days					6954 695
444	Link Verification - Amaritony	29 č zys	NA	Tue 9/18/12	NA	More 10/15/12	
445	Link Verification - Indiana	20 days	NA	Tue 9/25/82	NA.	Mon 19/22/12	8%
446	Optimize System FNE	123 days	N.A.	Fri 6/3/12	NA	Tue 11/27/12	6 -0
447	Optimize System FNE - Westmoreland	29 42 94	NA	Fri 6/8/12	NA.	Thu 6/21/12	9%
448	Oppinsing System PNE - Amesineng	IB days	NA	Test 10/16/12	NA	Thu LL/45/62	9%
449	Optimize System FNE - Indiana	26 day+	NA	Time 1/9/23/12	NA	Tue 11/27/12	9%
450	System Optionization Complete	9 4 254	NA.	Time 11/27/12	NA	Tuc 11/27/12	9%
451	Andre and Acceptance Testing	244 days	NA	Tue 6.5-12	NA	Fe6 5/86/83	6 /6/4
452	Westmoreland County Festing	5 days.	NA	Tue 6.5/12	NA	Mon: 6/11/12	6%
453	Perform R-56 Assåt	B 4894	NA.	Tuc 6/3/12	NA	The 6/7/12	3%
454	Perform System Testing	2 485%	NA	Fri 6/8/12	NA.	Men-6/11/12	9%
455	SATP Complete	0 days	NA.	Man 6/11/12	NA	Moen 5/11/12	0%
456	Actuations	122 days	NA	Wed 7/81/12	NA	Firm 12/27/12	6%
457	R-56 Countral Sistes	3 days	NA	Mon 9/24/12	NA	Wed-9/26/12	0%
458	R-S6 RF Sides	15 days	NA:	Wed 701/12	NA.	Time 7/38/85	9%
459	R-56 Consolie Locations	3 days	NA.	Mona 9/24/12	NA.	Wed 9/36/12	0%
	R-56 Panachiest Levelskoon	.	NA NA	Thea 9/27/02	NA NA	Wed 10/17/12	0%
460	1	15 4sye	ong programme and the control of the control of the				
461	Perform System Testing	10 days	%A	Fri 11/16/12	NA	The 11/29/12	6%
462	Perform Coverage Testing	39 days	NA	Fri 11/39/12	NA	Thus 12/27/12	1954
463	SATP Complete	Talanya	N.A.	Thu 12/27/12	NA.	The 12/27/12	9%
464	Indiana County	IVS days	NA	West 8/29/12	NA.	Fres instru	4%
465	R-56 Counted Sites	Baluys	MA	Tue 9/25/12	MA	The 9/17/12	2%
466	R-56 BF Sites	15 da y4	NA	Mon 9/17/12	NA.	Fri 10/5/11	0%
467	R-56 Conside Locations	I days	NA	Wed 8/29/12	NA	Bri # 31/12	6%
468	R-56 Punchlist Resolution	Id days	N4	Men 10/8/12	N.A	Mess 10/29/12	6%
169	Perform System Testing	io days	NA:	Wed 11/28/12	NA	Tes: 12/81/12	3%
470	Perform Coverage Testing	II days	NA	Fri 4/12/13	NA	Fri 5/20/13	0%
171	SATP Complete	0 days	NA:	Fn 5/10/13	NA.	Fei 5/19/13	6%
472	Cusaver	262 days	NA.	Tue 6/12/12	NA	Wed 6/11/13	6.90
473	Westmoreland	I day	N.A.	Tue 6/12/12	NA.	Tue 6/12/12	6/96
474	Colorer FNE	I day	NA.	Tue 6/12/12	NA.	Tue 6/12/12	0%
175	Cutover Complete	0 days	NA.	Tor. 6/12/12	VA.	Tue 6/12/12	9%
+/5 +76	Armstrone		NA NA	The 10/15/12	NA NA	Fet #2/28/12	47% 64%
	}	52 days	NA:	Fri 12/28/12	NA NA	Pri 12/28/12	#1% 0%
177	Catevot FNE	E day					
78	Cutover Disputch	I day	NA NA	Fri 12/28/12	N.A.	Fri 12/28/12	0%
179	Cutover Subscribers	1 day	NA .	Thu 10/18/12	NA	The 19/18/12	0%
80	Cutovez Complete	ઇ હેક્પુક	NA	Fri 12/28/12	NA	Fri 12/28/12	0%
181	Indiana	23 days	NA	Man 5/13/13	NA	Wed 6/12/13	€ ^a is
82	Cutova PNE	I day	NA:	Mon 5/13/13	NA	Mon 5/13/13	9%
83	Cutover Dispatch	I day	NA.	Mon 5/13/13	NA	Mon 5/13/13	0%

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Cutover Subscribers Cutover Complete Subscriber Installation Armstrong Receive and Inventory Mobile Install and Program Portable Program and Distribute Subscriber Acceptance Indiana Receive and Inventory Portable Program and Distribute Program Dash Mount Mobiles Program Control Staffans Install Dash Mount Mobiles Install Control Staffans Install Dash Mount Mobiles Install Control Staffans Install Control Staffans	1 day 0 days 352 days 37 days 37 days 10 days 10 days 0 days 223 days 243 days 5 days 5 days 5 days 15 days 16 days 18 days	NA NA NA NA NA NA NA NA NA NA NA	Tue 5/14/13 Wed 6/12/13 Tue 17/72 Tue 8/28/12 Tue 8/28/12 Thu 8/30/12 Thu 8/30/12 Thu 10/4/12 Wed 10/17/12 Wed 7/4/12 Men 7/9/12 Mun 7/6/12 Thu 5/2/12 Thu 5/2/12 Thu 5/2/12	NA N	Tue 5/14/13 Wed 6/12/13 Wed 6/12/13 Wed 16/17/12 Wed 8/29/12 Wed 19/12/12 Wed 19/17/12 Fri 5/16/13 Fri 7/6/12 Fri 7/13/12 Wed 7/25/12	0% 0% 0% 0% 0% 0% 0% 0% 0% 0%
Subscriber Installation Armstrong Receive and Inventory Mobile Install and Program Portable Program and Distribute Subscriber A occeptance Indiana Receive and Inventory Portable Program and Distribute Program Dash Mount Mobiles Program Control Stations Install Dash Mount Mobiles Install Dash Mount Mobiles Install Mobile Command Unit Mobiles Install Mobile Command Unit Mobiles Install Mobile Command Unit Mobiles Install Control Stations	352 days 37 days 2 days 2 days 10 days 10 days 3 days 5 days 5 days 5 days 15 days 15 days 16 days	NA N	Tue 2:7/12 Tue 8:28/12 Tue 8:28/12 Tue 8:28/12 Thu 8:30/12 Thu 10/4/12 Wed 10/17/12 Wed 7:4/12 Mon 7:9/12 Mon 7:9/12 Thu 7/26/12	NA N	Wed 6/12/13 Wed 16/17/12 Wed 9/12/12 Wed 19/12/12 Wed 19/17/12 Fri 5/16/13 Fri 7/6/12 Fri 7/3/12	9% 6% 0% 0% 0% 0% 0% 0% 0%
Armstrong Receive and Inventory Mobile Install and Program Portable Program and Distribute Subscriber A cooptance Indiana Receive and Inventory Portable Program and Distribute Program Dash Mount Mebiles Program Control Stations Install Dash Mount Mobiles Install Dash Mount Mobiles Install Onlive Stations Lustall Control Stations Subscriber A cooptance	37 days 2 days 16 days 16 days 0 days 223 days 3 days 5 days 6 days 16 days 16 days 16 days	NA N	Tue 8/28/12 Tue 8/28/12 Thu 8/30/12 Thu 10/4/12 Wed 10/17/12 Wed 7/4/12 Wed 7/4/12 Mon 7/9/12 Mon 7/16/12 Thu 1/2/4/2	NA	Wed 16/17/12 Wed 8/29/12 Wed 9/12/12 Wed 10/17/12 Wed 10/17/12 Fri 5/16/13 Fri 7/6/12 Fri 7/13/12	6% 6% 6% 6% 5% 6% 17%
Receive and Inventory Mobile Install and Program Portable Program and Distribute Subscriber A cooptaine Indiana Receive and Inventory Portable Program and Distribute Program Dash Mount Mobiles Program Control Stations Install Dash Mount Mobiles Install Mobile Command Unit Mobiles Install Adoble Command Unit Mobiles Install Mobile Command Unit Mobiles Install Mobile Command Unit Mobiles Install Mobile Command	2 days 10 days 10 days 0 days 213 days 3 days 5 days 5 days 15 days 1 days 1 days 1 days	NA N	Toc 8/28/12 Thu 8/30/12 Thu 10/4/12 Wed 10/17/12 Wed 7/4/12 Wed 7/4/12 Men 7/9/12 Men 7/16/12 Thu 7/16/12	NA	Wed 9/12/12 Wed 19/12/12 Wed 19/17/12 Wed 19/17/12 Fri 5/19/13 Fri 7/6/12 Fri 7/13/12	0% 0% 0% 0% 0% 0%
Mobile Install and Program Portable Program and Distribute Subscriber Acceptance Indiana Receive and Inventory Portable Program and Distribute Program Dash Mount Mobiles Program Control Stations Install Dash Mount Mobiles Install Mobile Command Unit Mobiles Enstall Mobile Command Unit Mobiles Lastall Control Stations Lastall Control Stations	10 days 10 days 0 days 223 days 3 days 5 days 6 days 15 days 1 day 16 days	NA NA NA NA NA NA NA NA NA NA	This 8/30/12 This 10/4/12 Wed 10/17/12 Wed 7/4/12 Wed 7/4/12 Men 7/9/12 Men 7/16/12 This 7/16/12	NA NA NA NA NA NA	Wed 9/12/12 Wed 19/17/12 Wed 19/17/12 Fri 5/19/13 Fri 7/6/12 Fri 7/13/12	0% 0% 0% 0% 0% 0% 0%
Portable Program and Distribute Subscriber A oceptance Indiana Receive and Inventory Portable Program and Distribute Program Dash Mount Mobiles Program Control Statisms Install Dash Mount Mobiles Install Mosh Command Unit Mobiles Install Mobile Command Unit Mobiles Install Control Stations Subscriber A ecoptance	10 days 0 days 223 days 3 days 5 days 8 days 5 days 15 days 1 day 16 days	NA NA NA NA NA NA NA NA	This 10/4/12 Wed 10/17/12 Wed 7/4/12 Wed 7/4/12 Most 7/9/12 Most 7/16/12 This 7/16/12	NA NA NA NA NA NA	Wed 10/17/12 Wed 10/17/12 Fri 5/18/13 Fri 7/6/12 Bri 7/13/12	0% 0% 6 % 0% 0%
Subscriber Acceptance Indiana Receive and Inventory Portable Program and Distribute Program Dash Mount Mobiles Program Control Stations Install Dash Mount Mobiles Install Dash Mount Mobiles Install Control Stations Subscriber Acceptance	O days 213 days 3 days 5 days 5 days 6 days 15 days 15 days 16 days	NA NA NA NA NA NA NA	Wed 10/17/12 Wed 7/4/12 Wed 7/4/12 Men 7/9/12 Men 7/16/12 Thu 7/16/12	NA NA NA NA NA	Wed 19/17/13 Fri 5/19/13 Fri 7/6/12 Fri 7/13/12	9% 6 % 9% 9%
Indiana Receive and Inventory Portable Program and Distribute Program Dash Mount Mobiles Program Control Stations Install Dash Mount Mobiles Install Mobile Command Unit Mobiles Install Mobile Command Unit Mobiles Install Control Stations Subscriber Acceptance	223 days 3 days 5 days 8 days 5 days 15 days 16 days	NA NA NA NA NA NA	Wed 7/4/12 Wed 7/4/12 Men 7/9/12 Men 7/16/12 Thu 7/16/12	NA NA NA NA	Fri 7/6/12 Fri 7/13/12	8% 9% 0%
Receive and Inventory Portable Program and Distribute Program Dash Mount Mobiles Program Control Stations Install Dash Mount Mobiles Install Mobile Command Unit Mobiles Linstall Mobile Command Unit Mobiles Linstall Control Stations Subscriber Acceptance	3 days 5 days 8 days 5 days 15 days I day 16 days	NA NA NA NA NA	Wed 7/4/12 Mon 7/9/12 Mon 7/16/12 Tha 7/26/12	NA NA NA	Fri 746/12 Fri 7/13/12	0% 0%
Portable Frogram and Distribute Program Dash Mount Mobiles Program Control Stations Install Dash Mount Mobiles Install Mobile Command Unit Mobiles Install Mobile Command Unit Mobiles Subscriber Acceptance	5 days 8 days 5 days 15 days 1 days 16 days	NA NA NA	Mon 7/9/12 Mon 7/16/12 Thu 7/26/12	NA NA	Bri 7/13/12	0%
Portable Frogram and Distribute Program Dash Mount Mobiles Program Control Stations Install Dash Mount Mobiles Install Mobile Command Unit Mobiles Install Mobile Command Unit Mobiles Subscriber Acceptance	5 days 8 days 5 days 15 days 1 days 16 days	NA NA NA	Mon 7/16/12 Thu 7/26/12	NA.		
Program Dash Mount Mobiles Program Control Stations Install Dash Mount Mobiles Install Mobile Command Unit Mobiles Install Mobile Command Unit Mobiles Install Control Stations Subscriber Acceptance	8 days 5 days 15 days 1 days 16 days	NA NA	Thu 7/26/12		Wed 7/25/12	A90.
Program Control Stations Install Dash Mount Mobiles Install Mobile Command Unit Mobiles Install Mobile Command Unit Mobiles Enstall Control Stations Subscriber Acceptance	5 days 15 days I day 16 days	NA NA		NA		
Install Dash Mount Mobiles Install Mobile Command Unit Mobiles Install Control Stations Subscriber Acceptance	15 days I day 16 days	NA.			Wed 2/1/12	0%
install Mobile Command Unit Mobiles Install Control Stations Subscriber Acceptance	l day 16 days			NA.	Wed 8/22/12	0%
Enstall Control Stations Subscriber Acceptance	ié days		Thu 8/23/12	NA	Thu 8/21/12	0%
Subscriber Леогразиче		NA	Fri 8/24/12	NA.	Fri 9/14/12	0%
		NA.	Fri 5/10/13	NA.	Fri 5/10/13	9%
1 CAMPING	352 days	NA.	Tue 2/7/12	NA.	Wed 6/12/13	6*6
DOS 2 A 89 A 5 A C 40000 A 6 A 5 C 4		NA.	Tue 2/7/12	NA NA	Wed 2/8/12	0%
Bridging the Knowledge Gup for ASTRO 25-System Administr.	2 days					0%
						994 994
						9%
						9%
~	-	:				694
						Ø%
MCC7500 Supervisor		:		2-40		9%
MCC7500 Console Operators	23 days	NA	Men 4/22/13	NA	Wed 5/22/13	9%
ASTRO 15 Portable and Mobile Train-the-Trainers	E5 days	NA	The 5/23/63	NA.	We86/12/13	9%
Tracting Complete	0 days	MA	Wed 6/12/13	N.A.	We8 6/12/13	0%
Finalize	312 days	N.A.	Wed 6/13/11	NA	Then 8/22/13	6 ⊕6
Westmoreland	ži days	NA	Wed 6/13/11	NA.	Wed 7/11/12	6.06
Final Inspection With Customer	t day	NA	Wed 6/13/12	NA	Wes 6/13/12	1944
Resolve Panch List	20 days	NA.	The 6/1 1/12	NA	Wed 7/11/12	0%
Final Asceptance	@ days	NA.	Wed 7/11/12	NA.	Wed 7/11/12	0%
Armstrong	118 days	N.A.	Mon 12/31/12	NA.	Wed 6/12/13	⊕ ®±
Final Inspection with Customer	5 days	NA	Moss 12/31/52	NA	Fri 1/4/13	67%
Finalize Documentation	20 days	NA.	Mon 1/7/13	NA	Fri 2/1/13	6%
Transition Service/PIC	I days	NA:	Man 1/4/13	NA	Wed 2/6/13	0%
Properhiest - Formal		NA.	Thea 2/7/£3	NA	Wed3#/13	0%
Final Acceptance		NA	Wel 6/12/13	NA.	Wed 6/12/13	9%
Indiana	51 days	N.S.	Thu 6/13/13	NA.	Thu 8/22/13	6.00
		NA	Thu 6/L3/13	NA.	We46/19/13	0%
•						0%
		,		167.4		8%
						9%
					Thu 8/22/13	0%
	Transing Complete Finalize Westmoreland Final Inspection With Customer Resolve Punch List Final Acceptance Armstreeg Final Acceptance Armstreeg Finalize Documentation Transition Service/PIC Punchlist - Final Final Acceptance	ASTRO 25 IVAD Transload System Overview (grart 1 of 3) ASTRO 25 IVAD Introduction to Radio System Administration ASTRO 25 IVAD Introduction to Radio System Administration ASTRO 25 IVAD Digital Montal Aid I day MOSCAD Operator I day MCC7500 Supervisor I day MCC7500 Console Operators ASTRO 25 Portable and Mobile Transloe-Transers Translog Complete O days Finalize Westmordand 21 day Resolve Punch List Pinal Receptance I day Final Acceptance Armstrong Final Acceptance I day Final Acceptance I day Final Respection with Customer Final Respection Service/PTC Pauchlist - Final Final Inspection with Customer I day Final Receptance O days Final Receptance Final Receptance O days O days Final Receptance O days O day	ASTRO 25 IV&B Transled System Overview (part 1 of 3) ASTRO 25 IV&B Introduction to Radio System Administration ASTRO 25 IV&B Introduction to Radio System Administration ASTRO 25 IV&B Radio System Administration Weshelsop (pas 10 days NA ASTRO 25 IV&B Digital Motural Aid 1 day NA MOSCAB Operator 1 day NA MCC7590 Supervisor 1 day NA MCC7590 Supervisor 2 days NA ASTRO 25 Portable and Mobile Train-the-Drainers 15 days NA ASTRO 25 Portable and Mobile Train-the-Drainers 15 days NA Training Complete 0 days NA Finalize 312 days NA Finalize 312 days NA Finalize 314 days NA Finalize 315 days NA Finalize 315 days NA Finalize 316 days NA Final Inspection With Customer 1 day NA Resolve Punch List 20 days NA Armstrong 118 days NA Armstrong 118 days NA Armstrong 118 days NA Final Acceptance 5 days NA Transition Service/PIC 3 days NA Final Acceptance 0 days NA Final Acceptance 5 days NA Final Acceptance 0 days NA Final Acceptance 5 days NA Final Inspection with Customer 5 days NA Final Inspection with Customer 5 days NA Final Acceptance 5 days NA Final Respection with Customer 5 days NA Final Respecti	ASTRO 25 IVAD Transhed System Overview (part 1 of 3) 2 days NA The 2/23/12 ASTRO 25 IVAD Introduction to Radio System Administration 2 days NA Mona 2/27/12 ASTRO 25 IVAD Introduction to Radio System Administration 2 days NA Wed 5/23/12 ASTRO 25 IVAD Digital Monard Aid 1 day NA Wed 5/23/12 MOSCAD Operator 1 day NA Fit 4/19/13 MCC7500 Supervisor 1 day NA Fit 4/19/13 MCC7500 Console Operators 23 days NA Mon 4/22/13 ASTRO 25 Portable and Mobile Train-the-Drainers 15 days NA Wed 6/13/12 Finaline 312 days NA Wed 6/13/12 Finaline 312 days NA Wed 6/13/12 Westmoredand 21 day NA Wed 6/13/12 Final Inspection With Customer 1 day NA Wed 6/13/12 Resolve Punch List 20 days NA Wed 6/13/12 Armstrong 118 days NA Wed 7/18/12 Final forspection with Customer 5 days NA Wed 7/18/12 Final forspection with Customer 5 days NA Mon 12/31/12 Final forspection with Customer 5 days NA Mon 12/31/12 Final forspection with Customer 5 days NA Mon 12/31/12 Final forspection with Customer 5 days NA Mon 12/31/12 Final forspection with Customer 5 days NA Mon 12/31/12 Final forspection with Customer 5 days NA Mon 12/31/12 Final forspection with Customer 5 days NA Mon 12/31/12 Final forspection with Customer 5 days NA Mon 12/31/12 Final forspection with Customer 5 days NA Mon 12/31/12 Final forspection with Customer 5 days NA Thu 6/13/13 Final forspection with Customer 5 days NA Thu 6/13/13 Final forspection with Customer 5 days NA Thu 6/13/13 Final forspection with Customer 5 days NA Thu 6/13/13 Final forspection with Customer 5 days NA Thu 6/13/13 Final forspection with Customer 5 days NA Thu 6/13/13 Final forspection with Customer 5 days NA Thu 6/13/13 Final forspection with Customer 5 days NA Thu 6/13/13 Final forspection with Customer 5 days NA Thu 6/13/13 Final forspection with Customer 5 days NA Thu 6/13/13 Final forspection with Customer 5 days NA Thu 6/13/13	ASTRO 25 IV-RD Transled System Overview (part 1 of 3) 2 days NA Thu 2/23/12 NA ASTRO 25 IV-RD Introduction to Radio System Administration 2 days NA Mon 2/27/12 NA ASTRO 25 IV-RD Digital Material Administration Weekshop (past 1 days NA Wed 5/9/12 NA ASTRO 25 IV-RD Digital Material Aid 1 day NA Wed 5/9/12 NA MOSCAD Operator 1 days NA Fin 4/19/13 NA MOSCAD Operator 1 days NA Fin 4/19/13 NA MCC7509 Supervisor 1 days NA Fin 4/19/13 NA ASTRO 25 IV-RD Digital Material Aid 1 days NA Fin 4/19/13 NA ASTRO 25 Portable and Mobile Train-the-Drainers 15 days NA Mon 4/22/13 NA ASTRO 25 Portable and Mobile Train-the-Drainers 15 days NA Wed 6/12/13 NA Finaling Complete 9 days NA Wed 6/12/13 NA Wed 6/12/13 NA Finaling Complete 1 days NA Wed 6/12/13 NA Wed 6/12/13 NA Finaling Complete 1 days NA Wed 6/13/12 NA Finaling Complete 1 days NA Wed 6/13/12 NA Final Inspection With Customer 1 days NA Wed 6/13/12 NA Final Inspection With Customer 1 days NA Wed 6/13/12 NA Resolve Punch List 20 days NA Wed 6/13/12 NA Armstrong 118 days NA Mon 12/31/12 NA Final Inspection with Customer 5 days NA Mon 12/31/12 NA Final Inspection with Customer 5 days NA Mon 12/31/12 NA Final Inspection with Customer 9 days NA Mon 12/31/12 NA Final Inspection with Customer 9 days NA Mon 12/31/12 NA Final Inspection with Customer 9 days NA The 2/31/13 NA Final Inspection with Customer 9 days NA The 2/31/13 NA Final Inspection with Customer 9 days NA The 6/13/13 NA Final Inspection with Customer 9 days NA The 6/13/13 NA Final Inspection with Customer 9 days NA The 6/13/13 NA Final Inspection with Customer 9 days NA The 6/13/13 NA Final Inspection with Customer 9 days NA The 6/13/13 NA Final Inspection with Customer 9 days NA The 6/13/13 NA Final Inspection with Customer 9 days NA The 6/13/13 NA Final Inspection with Customer 9 days NA The 6/13/13 NA The 6/13	ASTRO 25 IVAD Tumbed System Overview (part 1 of 3) 2 days NA Thu 2/23/12 NA 551/2/13/12 ASTRO 25 IVAD Introduction to Radio System Administration 1 days NA Mon 2/27/12 NA Toe 2/28/12 ASTRO 25 IVAD Radio System Administration Wedschop (par 10 days NA Wed 5/9/12 NA Toe 3/22/12 ASTRO 25 IVAD Digital Monard Aid 1 day NA Wed 5/9/12 NA Wed 5/23/12 NA Wed 5/23/12 MOSCAD Operator 1 day NA Bin 5/24/12 NA Fin 1/24/13 MCC7500 Supervisor 1 day NA Fin 1/19/13 NA Fin 4/19/13 MCC7500 Console Operators 23 days NA Mon 1/27/13 NA Wed 5/22/13 ASTRO 25 Portable and Mobile Train-the-Dramers 15 days NA Wed 6/12/13 NA Wed 5/22/13 ASTRO 25 Portable and Mobile Train-the-Dramers 15 days NA Wed 6/12/13 NA Wed 6/12/13 Finaline 312 days NA Wed 6/12/13 NA Wed 6/12/13 NA Wed 6/12/13 Finaline 1 day NA Wed 6/13/12 NA Wed 6/13/12 Westmordand 21 days NA Wed 6/13/12 NA Wed 6/13/12 Final Inspection With Customer 1 day NA Wed 6/13/12 NA Wed 6/13/12 Final Inspection With Customer 1 day NA Wed 6/13/12 NA Wed 6/13/12 Resolve Punch List 29 days NA Wed 6/13/12 NA Wed 6/13/12 Armstrong 115 days NA Wed 7/11/12 Armstrong 115 days NA Mon 12/31/12 NA Wed 7/11/12 Armstrong 156 days NA Mon 12/31/12 NA Wed 7/11/12 Armstrong 156 days NA Mon 12/31/12 NA Wed 6/12/13 Final Inspection with Customer 5 days NA Mon 12/31/12 NA Wed 6/12/13 Final Inspection with Customer 9 days NA Mon 12/31/12 NA Wed 6/12/13 Final Inspection with Customer 9 days NA Thu 6/13/13 NA Wed 6/12/13 Final Inspection with Customer 9 days NA Thu 6/13/13 NA Wed 6/12/13 Final Inspection with Customer 9 days NA Thu 6/13/13 NA Wed 6/12/13 Final Inspection with Customer 5 days NA Thu 6/13/13 NA Wed 6/12/13 Final Inspection with Customer 5 days NA Thu 6/13/13 NA Wed 6/12/13 Final Inspection with Customer 5 days NA Thu 6/13/13 NA Wed 6/12/13 Final Inspection with Customer 5 days NA Thu 6/13/13 NA Wed 6/12/13 Final Inspection with Customer 5 days NA Thu 6/13/13 NA Wed 6/12/13 Final Inspection with Customer 5 days NA Thu 6/13/13 NA Wed 6/12/13 Final Inspection with Customer 5